# DOCUMENT RESUME

ED 042 294 EC 006 121

AUTHOR Withrow, Frank B.; Brown, Donald W.

TITLE

An Experimental Program of Language Development
Using a Systematic Application of Audio-Visual Aids
to Reinforce the Classroom Teacher's Program for

Children with Impaired Hearing. Final Report.

INSTITUTION Illinois School for the Deaf, Jacksonville.

SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau

of Research.

PUB DATE Jun 68

GRANT OEG-6-19-074

NOTE 53p.

EDRS PRICE EDRS Price MF-\$0.25 HC-\$2.75

DESCRIPTORS \*Audiovisual Instruction, \*Aurally Handicapped,

\*Exceptional Child Research, Instructional Films,

\*Language Development, Lipreading, Program

Descriptions, Teaching Methods Illinois Communication Scale

#### ABSTRACT

IDENTIFIERS

Three hundred and six 8mm cartridge-type films were produced to provide deaf children instruction in and practice with noun vocabulary, question forms, prepositions, and speechreading. Films were placed in 12 classes. Method of presentation and time spent was determined by individual teachers, most of whom had attended a three-day orientation workshop. Group I, consisting of 38 children (median age 8.6) worked with the projectors and language films similar to but not a part of the experimental films for one year. Group II (43 children, median age 7.6) used the experimental films for one year. Group III (29 children, median age 6.6) used both groups of films during two years. To determine progress in speechreading ability, the Illinois Communication Scale (Form B) was administered to each class before and after each year. Group III showed a 50% improvement in speech reading ability over the two years. Group I improved 21.74% while Group II showed 12.00% improvement. Reasons suggested for this are differences in intelligence, previous education, and age, and greater similarity than had been thought between the experimental and non-experimental films. The major criticism related to content (unrelated noun vocabulary). Appendixes include the Illinois Communication Scale and the Evaluation questionnaire. (KW)



#### FINAL REPORT

Grant No. 0E6-19-074

# AN EXPERIMENTAL PROGRAM OF LANGUAGE DEVELOPMENT USING A SYSTEMATIC APPLICATION OF AUDIO-VISUAL AIDS TO REINFORCE THE CLASSROOM TEACHER'S PROGRAM FOR CHILDREN WITH IMPAIRED HEARING

June, 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of Education Bureau of Research



# AN EXPERIMENTAL PROGRAM OF LANGUAGE DEVELOPMENT USING A SYSTEMATIC APPLICATION OF AUDIO-VISUAL AIDS TO REINFORCE THE CLASSROOM TEACHER'S PROGRAM FOR CHILDREN WITH IMPAIRED HEARING

Grant No. 0E6-19-074

Directors:
Frank B. Withrow, Ph. D.
1966 - 1967
Donald W. Brown, Ph. D.
1967 - 1968

The research reported herein was performed persuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Illinois School for the Deaf Jacksonville, Illinois



# CONTENTS

						Page
INTRODUCTION						
The Problem						1
Objectives.		• •		• • • •	• • • •	3
PROCEDURE						
Cooperating	Schools				• • •	4
Orientation	Workshop				÷ • • •	6
	on of Equipment					7
Utilization	of Materials			• • • a		7
Testing of	Students	• •			• • • •	9
Evaluation \	by Teachers .	a •	• • • •	• • • •	• • • •	11
RESULTS						
Student Per	rformance					12
Teacher Eva	luation	• •	• • • • •	• • • •	• • • •	17
DISCUSSION AND C	OVERNETONE					22
DISCUSSION AND C	CONCLOSIONS	• •	• • • •	• • • •	• • • •	22
SUMMARY						26
REFERENCES						29
APPENDICES						A
	Guide					A B
	mmunication Sca Ouestionnaire.					



# TABLES

		Page
1.	Composition of three groups of participating pupils	13
2.	Average pre-test raw score by age	14
3.	Comparison of average pre-test scores of research subjects with scores of standardization population - by age	15
4.	Change in performance on Illinois Communication Scale	16



#### INTRODUCTION

#### The Problem

It has been an established concept that the deaf child who has frequent opportunities to use his speech and speech reading develops greater proficiency in these areas. Quigley and Frisina (1961) found in their study of day and residential pupils that the day pupils had significantly better speech and speech reading abilities. They attributed this to the "practice effect" or "oralness of the environment" of the day pupils. Another significant finding was that the day pupils of deaf parents, while not doing as well in speech and speech reading, did do significantly better in finger spelling and vocabulary. They attribute this result to the use of finger spelling in the home. The better vocabulary shown by this group can be attributed to the "richer language environment" or "practice effect." This study assumes that the more contact the deaf child has with language practice, regardless of the mode of his communication, the more proficient he will be in language.

At the present time residential schools for the deaf do not have the personnel to create a saturated communication environment.

In fact, as the teacher shortage increases and our class sizes increase, the deaf child's communication environment decreases. At the same time the communication environment is decreasing we are faced with an ever-increasing number of multiply handicapped children.



At the 40th meeting of the Convention of American Instructors of the Deaf, Lowell (1962, p. 64) called attention to this increase and suggested the need for segregating these children from the so-called "normal" deaf child, in order to better diagnose and educate them. Furth (1962) estimates that, based on teachers' judgments as to whether pupils are achieving at expected levels for the "normal" deaf child, 44 per cent, or more, of the deaf children between the ages of eight and twelve are below average expected achievement.

Confronted with these two rather glaring facts: (1) teacher and personnel shortages, and (2) an increase in multiply handicapped children, we must look for additional methods of teaching and of expanding communication contacts for these children. We urgently need to make better use of the master teacher's talents and to expand the pupils' opportunities to communicate. One program that will better utilize the master teacher's time and increase the total communication contact of the pupil is to use/audio-visual aids more effectively than in the past. The field of education of the deaf has been extremely unimaginative in the utilization of these aids. Some notable exceptions have been the advent of captioned films and some attempts at lip reading films. Both of these experiences have, however, been primarily aimed at adult or older children's consumption rather than younger children.

It is possible with 8mm movies and filmstrips with tape recorders to program language, lip reading and acoustic training,



which can complement classroom programs. If we adapt audio-visual aids to programmed learning, we can broaden the communication contact of our children.

We propose that programs can be developed which can extend communication opportunities for hearing impaired, multiply handicapped children, by adapting a highly structured language program to teaching machine programs presented through audio-visual aids.

Additional contact can be given in the classroom, the dormitory and the home by developing programmed films and tape recordings. The child's response to both visual and auditory stimuli should be in speech and in writing.

# <u>Objectives</u>

The primary objective of the first phase of this project (Grant No. 0E4-19-055) was to develop 8mm films which could be used in auto-instructional projector units and which would be aimed at the development of language and speech reading proficiencies.

The films were to be primarily single-concept, noun vocabulary in nature, with a sampling of films to also include question and answer forms, prepositions, number concepts and descriptive stories. A subsidiary component of this objective was the design of the films in such a way that a classroom teacher could integrate a language program provided by the films into her total curriculum and provide individualized instruction which is frequently impossible to include in the daily classroom program.



4

The second major objective was to evaluate the equipment, films and language program in classroom settings. While one of the desires here was to determine to what extent the utilization of these films would further the language and speech reading development of young deaf children, the chief aim was to obtain from teachers their criticisms, suggestions for modification and general comments on what they thought to be the strengths and weaknesses of the equipment and materials as presently constructed.

#### **PROCEDURE**

To fulfill the first objective, a total of 306 language films were designed and produced. These films provided instruction in vocabulary (taken from standard vocabulary lists in general use with hearing impaired children) and were 8mm cartridge type films suitable for use in auto-instructional movie projectors with self-contained TV-type screens. While originally, silent films were intended, a sound version of the entire series was also produced. A list of the vocabulary presented and a general description of means of using the films has been published as a Teacher's Guide (Appendix A).

## Cooperating Schools

In the interest of comprehensiveness, it was decided that the films would be used and evaluated in as many schools and classes for



the hearing impaired as possible, representing both day and residential schools, and that a wide age range of children should be obtained. At the outset of the field testing the cooperating schools were:

- 1. Atwater School, Milwaukee, Wisconsin.
- 2. Central Institute for the Deaf, St. Louis, Missouri.
- 3. Champaign Oral Deaf Program, Champaign, Illinois.
- 4. Dallas Pilot Institute, Dallas, Texas.
- 5. Illinois Children's Hospital-School, Chicago, Illinois.
- 6. Illinois School for the Deaf, Jacksonville, Illinois.
- 7. Indiana School for the Deaf, Indianapolis, Indiana.
- 8. Iowa School for the Deaf, Council Bluffs, Iowa.
- 9. Kendall School for the Deaf, Washington, D. C.
- 10. Marquette School, Chicago, Illinois.
- 11. Prescott School, Lincoln, Nebraska.
- 12. St. Joseph Institute for the Deaf, St. Louis, Missouri.
- 13. Walden School, Deerfield, Illinois.

The above schools represented parochial, private and public residential schools, public day classes, a private day school and a school designed primarily for the orthopedically impaired. Classes in the various programs which were selected for utilization of the materials included those for "typical" hearing impaired children, educationally retarded deaf children, orthopedically impaired and multiply handicapped deaf youngsters. Ages of children participating ranged from five through sixteen, with one student above nineteen



years of age. Gver 90% of the children were under thirteen years of age, with the range five years through eight years comprising the largest group.

### Orientation Workshop

After the construction of the films and prior to field testing in selected programs, a workshop was held at the Illinois School for the Deaf (August 15-17 1966) for the purpose of orienting the teachers who would be participating in the evaluation phase of the project. During this three-day training program teachers were given an introduction to the concepts and procedures of automated teaching, heard lectures on the effective use of media with hearing impaired children, and were presented with an over-view of the background and objectives of this project. Time was provided for demonstrations of the projectors, materials and other equipment which would eventually be used by the participating teachers, and the responsibilities of the Illinois School for the Deaf Research Department and the cooperating schools were delineated. In order to assess the effectiveness of the workshop, questionnaires were sent to each of the participants after they had returned to their schools and been using the program materials for a reasonable period of time. The results of this questionnaire survey will be considered in a later section of this report.



#### Organization of Equipment and Materials

Projectors, file cabinets, language masters and other equipment were sent to the participating schools by the Fall of 1966. Due to uncontrollable delays in film production, the experimental films were not distributed to all of the programs until the Fall of 1967. During the period in which the experimental films were not available, a series of the original films produced by the Illinois School for the Deaf Research Department were provided, with the explanation that, while these would afford opportunity to use and benefit from the auto-instructional units, they did not represent the materials which were to be finally evaluated.

#### Utilization of Materials

No attempt was made to impose a particular methodology upon the participating teachers; rather it was hoped that profitable ideas, suggestions and criticisms would emerge as the teachers organized their own methods of using the films. Several major common denominators did exist, however, in that in the majority of classes (1) the films were used individually by one child at a time, (2) the sequence of presentation followed was that indicated by the numeration of the films, (3) occasional teacher supervision preceded independent use of the materials by the children.

Although some teachers reported that they did not feel the children could satisfactorily use the machines without the teacher's help and others occasionally employed one pupil as a monitor for



another, most of the film usage consisted of one child working independently. In only two of the fourteen classes were teaching booths provided for the pupils while they were using the machines. The amount of time spent by a single child with the materials varied from about ten minutes to thirty minutes per day, with a certain amount of irregularity being found in some of the classrooms. In some instances children were permitted to complete as many films as possible in their allotted time period; whereas in others, when they finished a designated number of films they were required to repeat them.

One of the biggest differences in use of the materials was in the response required by the child. Part of this procedural variation was related to the differing chronological ages and academic level of the children. In some classes the child would write his response to each question which he speechread from the film, keep a record of his correct responses, and move on to the next film after a successful completion. In other classes the children gave their responses orally. An indication of some of the idiosyncratic applications of the equipment and materials is found in the following comments from written statements of the teachers:

1. After several group demonstrations of the machine, each child was "tested" on its use. As a child passed the test, he was allowed to use the machine with a partner, choosing any film at random. Now, specific films are assigned (in order). After viewing a film, the child writes (on a sheet with his name on it) the date and the film number. He also makes a mark if all his responses were correct. When a film is successfully completed, the next one is assigned. (Each day, children's names and film numbers are listed on the chalk board.)



The machines are used during individual speech periods -- about an hour every morning and one-half hour every afternoon -- and during any free time.

2. Each child has ten minutes or more a day on a regular schedule. The teacher selected the films for each week for each child.

This plan abetted rigidity in some children so the schedule had to be changed weekly.

- 3. In the beginning the children used the machine individually, after several months the children used the machine in small groups. One child being the teacher or operator of the machine.
- 4. My class consists of eight multiply handicapped hard-of-hearing children. The equipment was so set up that the voice could be transmitted through the desk binaural aid sets. The children viewed films, attempted to say the words as they heard them, and when instructed to, wrote the words. Following viewing of a single film a variety of follow-up activities were presented.
  - a. spelling tests (words given orally by teacher)
  - b. illustrating words on paper or at board, e.g.:
  - c. fill in blanks, e.g.:
     The boy was sick.
     The \_\_\_\_\_ came to see him. (nurse)
  - d. oral questions or guessing games, e.g.: It is red, white and blue. It has stars and stripes. We see it on a pole. What is it? (flag)

flag snowman

Where do you sleep? (bedroom)

#### Testing of Students

As will be discussed in the Results section, it was not felt that a definitive measure of student improvement due to utilization of the films alone could be obtained without radically circumscribing the ways in which the teachers would be permitted to handle the materials. An attempt was made, however, to determine whether



improvement in speech reading ability would be noted in the children at the conclusion of the project. To this end, the Illinois Communication Scale, (Appendix B), a test of the ability to speech read single words, sentences, and questions about a story, was administered to the classes both prior to and following the introduction of the films.

Each of the classes was visited by a research staff member in the Fall and Spring of 1966-67 and 1967-68. As the experimental films had not been provided the teacher by the end of the 1966-67 school year, the children in the classes during that year can be viewed as a control group. Sixty-seven students were involved in this first set of pre- and post-tests. Thus, two measures of speech reading ability, one at the beginning of a school year and the other at the conclusion of a year in which the auto-instructional units were in the classroom but not fully utilized, due to the absence of experimental films, were obtained. The last measure, or post-test can, with certain reservations, be viewed as an index of progress in speech reading due to traditional methods of instruction.

The testing conducted during the 1967 school year yielded an indication of speech reading ability, as measured by the Illinois Communication Scale, prior to and after one school year's experience with the research program and materials. Twenty-nine of the children who were involved in the first year's testing remained in the project during the second year. A total of seventy-two children comprised what could be called the experimental group, with twenty-nine having had one year's practice with the machines and films and thirty-eight being new to the project.



#### Evaluation by Teachers

Formal evaluations by each of the participating teachers were obtained at two stages of the research. A questionnaire was completed eight months after the Orientation Workshop, during which time the teachers had been using the equipment and some of the original films. A second evaluation was submitted in the spring of 1968 after the last series of post-testing of the students. The teachers were asked to provide as comprehensive a critique as possible of the quality and effectiveness of the program materials and to specifically comment on a) the equipment, b) film content and structure, c) pupil reaction, d) appropriateness of the films for the age group being taught and e) needed modifications.



#### RESULTS

## Student Performance

As noted previously, the subjects were divided into three groups. Group I consisted of 38 children from the twelve participating classes, who were tested only during the Fall of 1966 and the Spring of 1967. They had been exposed, for one school year, to some of the original sample films, but not to the experimental release prints. This Group could thus be viewed as a semi-control group, for whom traditional methods of instruction were less modified than for Groups II and III. Group II included 43 children who entered the research in the Fall of 1967 and had one year's experience with the experimental films and no prior exposure to or practice with the equipment or films. Group III was comprised of the 29 pupils who were tested over a two year period and who had one academic year with the practice films and one year with the experimental films.

The Illinois Communication Scale (ICS), Form B, a filmed test of speech reading ability, containing 50 items, was administered as a pre- and post-test to the three groups. Groups I and II received one administration each of the pre- and post-test (the former group in the 1966-67 school year and the latter in 1967-68). Group III was given the test four times, one time each prior to the beginning of school years 1966-67 and 1967-68, and again at the conclusion of each of these school years.



Table 1 summarizes the composition of the three groups by age and initial average raw score on the ICS. The similarity of pretest scores suggests comparability of the three groups on the variable of speech reading proficiency. Median age is somewhat dissimilar, however, with one year's difference occurring between each group.

Table 1. Composition of Three Groups of Participating Pupils

Group	I	II	III
N	38	43	29
Age Range	5-0 to 16-0	4-0 to 11-11	6-0 to 19-11
Median Age	8-6	7-6	6-6
Modal Age	7-6	7-6	6-6
Average Pre-Test Score on ICS	22.71	22.79	20.00

In Table 2, the average pre-test raw score is presented by age group and reflects a relatively linear progression of increased performance with advanced age but not to the extent that age alone could be considered the significant variable. The linearity is also not as pronounced as that obtained on the 417 subjects who comprised the standardization population of the ICS (Cf. Withrow, F. B., The Development of a Receptive Communication Scale for Deaf Children). Another interesting difference between the scores of the three groups of this study and that of the standardization group is that at almost every age level, the present groups had average scores which were



considerably higher than that of the standardization sample. This is reflected in Table 3 and, while size of sample for each age group varies, suggests differences in the two populations which will be discussed with regard to the results of this study.

Table 2. Average Pre-Test Raw Score by Age

	<del></del>	<del></del>	
Age	Group I	Group II	Group III
4-0 to 4-11		17.00	
5-0 to 5-11	12.00	12.00	16.00
6-0 to 6-11	17.40	22.40	15.69
7-0 to 7-11	21.66	22.00	27.33
8-0 to 8-11	22.37	23.88	20.00
9-0 to 9-11	25.20	22.50	29.33
10-0 to 10-11	23.00	37.50	43.00
11-0 to 11-11	40.00	33.00	
12-0 to 12-11	26.00		15.00
13-0 to 13.11			
14-0 to 14-11			15.00
15-0 to 15-11			
16-0 to 16-11	32.00		



Table 3. Comparison of Average Pre-Test Raw Scores of Research Subjects with Scores of Standardization Population - by Age

Age	Standardization	Present	Research	Groups
	Population	I	II	711
4			17.00	
5	-	12.00		16.00
6	8.00	17.40	22.40	15.69
7	13.00	21.66	22.00	27.33
8	18.50	22.37	23.88	20.00
9	21.00	25.20	22.50	29.33
10	24.75	23.00	37.50	43.00
11	27.40	40.00	33.00	
12	29.25	26.00		15.00
13	31.50			
14 .	31.50			15.00
15				
16		32.00		



Change in performance on the ICS by the three groups from pretest to post-test is shown in Table 4.

Table 4. Change in Performance on Illinois Communication Scale

	Average Raw Score							
Administration	Group							
	I	II	III					
Pre-Test 1 (Fall, 1966)	22.71	22.79	20.00					
Post-Test 1 (Spring, 1967)	27.63	25.51	25.86					
Pre-Test 2 (F <b>a</b> 11, 1967)			26.86					
Post-Test 2 (Spring, 1968)			29,96					
Degree of Improvement	21.74%	12.00%	50.00%*					

<sup>\*</sup>Represents percentage of improvement between first pretest (Fall, 1966) and second post-test (Spring, 1968) -- two academic years.

The greatest improvement in speech reading score was made by Group III which, although younger, on an average, than either of the other two groups, had had use of language films for two years, rather than one. Group I, which did not have advantage of the experimental release films but had used some of the earlier films, showed substantially more improvement (21.74% vs. 12.00%) than Group II, which had had one year with the experimental films but no previous experience with the equipment or similar films.



#### Teacher Evaluation

While brevity would be served by summerizing teacher comments and criticisms, it is felt that a more valuable contribution can be made by categorizing some of the actual and representative statements and then discussing the major commonalities of teacher opinion. Each of the following numbered statements, under the topic headings: equipment, film content and structure, pupil reaction, appropriateness for age group being taught, and needed modifications, represents a comment by one classroom teacher or program supervisor.

#### Equipment:

- 1. Excellent, easy to use, durable. The cartridges represent a superior innovation and are a major improvement over film requiring threading, rewinding, etc.
- 2. I think the machines are great.
- 3. We found it difficult to view the films in regular classrooms in which there was sunlight or artificial light. (Only one teacher commented on this.)
- 4. Children unable to stop machine to read sentence or to look more closely. Should be a pause button with off-on switch.
- 5. Two different speeds of machines make interchange between them awkward.
- 6. I think the ease in using the projector is a great advantage, although I do wish our headphone sets could have fitted in the jack.

#### Film Content and Structure:

1. Unsatisfactory, disappointing. Considering the amount of time spent in planning, organizing and producing the series, it fails, in my opinion, as a really useful, constructive,



coordinated classroom aid. The organization of vocabulary is so unrelated within a single film that it was very difficult to develop follow-up activities that would have broadened the pupils' knowledge or increased their expressive-receptive experiences. The use of the units resulted in one lesson after another of unrelated, isolated words. It was very difficult, in fact impossible, to select a film to correlate with any phase of the curriculum being developed.

2. Lipreading practice should include both visual and auditory information. Occasional, careful use of auditory cues alone may serve particular purposes but probably only under the direct control of a teacher. The use of the visual without sound should occur rarely if at all. Silent films, even for lipreading practice, seem to have limited value.

Lipreading of single words is of limited value. Experience with sounds and isolated words is pertinent for developing speech and for leading children to understand certain fundamental intermodality relations. Ideally all such teaching probably should be under the direct control of the teacher rather than for independent practice or for self teaching. Since the child's performance is central to work with phonologic features, it is difficult to conceive of effective predetermined materials.

Series of unrelated words or sentences for lipreading practice fail to enhance logical, linguistically oriented thinking. Lipreading should be developed as a linguistic skill rather than as a visual skill.

Frequent repetition or practice of materials isolated from purposeful communicative function may lead some children to derive or conclude something other than the teacher's intended principles or patterns. Such erroneous conclusions may be nearly impossible to detect in materials presented primarily in the simplified stimulusresponse activities which the teaching machine, self teaching or independent practice media seem to require.

- 3. Preposition films too unrealistic; request word STOP written on red blank space; persons in films too expressionless. Use of a single word is confusing and not what a child sees in daily unstructured language situations.
- 4. Too many words on one film; not enough repetition for first year students. Some words not pronounced correctly by woman on films. Some one syllable words seem to have two.



5. We eliminated all films that showed prepositional phrases in which situations were unrealistic, such as a tree in a bathtub, etc.

## Pupil Reaction:

- 1. The machine fascinated the children.
- 2. The inherent appeal and the apparent entertainment value of materials presented on visual projection equipment is great All of the children with whom we have used such equipment seemed to be entranced, regardless of the content of the material and regardless whether or not they understood the material presented. Consequently, it is most urgent that the materials presented in this fashion effectively serve the underlying purposes of language instruction.

#### Appropriateness for Age Group Being Taught:

- 1. It seemed to me that the materials I received the simple one-word exercises would be a great help to young deaf children in beginning language and lipreading work; in other words, three to five year olds. At the level I teach, six and seven year olds usually in their third year of school, we continue vocabulary building but move more into verb phrasing and simple sentences.
- 2. Many of the films involved language principles and other work too advanced for use with our pupils (ages five and six years). We chose about fifteen that were appropriate for our use. Our children are unable to read and write cursive writing which accompanied pictures on film.

#### Needed Modifications:

1. Brief film sequences which show experiences similar to ones a classroom of children might have, (making cookies, making jello, playing with a new toy, etc.) could be valuable. The children in the film should have normal speech and language and should talk about what they are doing (sound track needed). Following this on the film, the filmed children could ask questions about the activity -- for the viewing child to answer in writing or in speech, with teacher (or aide) monitoring.



Perhaps animated cartoons could be developed to depict basic number relations as taught in kindergarten, first and second grade. Vocabulary such as enough, too many, etc. could be demonstrated and appropriate questions could be asked on accompanying work book sheets or on the film or both.

There is need for single concept films to present particular verbs or combinations of verbs. Numerous examples for various verbs and verb functions would be useful.

Short story sequences portrayed on film about which the teacher could develop language and vocabulary at the level appropriate for her class could be of considerable practice and enrichment value.

Films designed to teach specific vocabulary should be developed. For example, to give practice in the learning of names of tools, a film showing a scene in a shop where a teacher could show tools, say what they were, show the written words, use them, and say and write sentences about them.

2. Revise organization of content into learning units. Consult teaching guides and curriculum outlines for Math, Science, Social Studies, Health, Arts and Crafts.

Use the same idea for the presentation of action verbs. What better way for children to understand difficult verb concepts than to see them lively and moving rather than looking at still pictures.

3. Films would be more helpful if vocabulary was arranged in units to be used with units of study currently taught in classroom.

In summary, the participating teachers tended to agree on the interest appeal and technical adequacy of the equipment, enthusiastic reception of the students, and preference of sound to silent films. The major criticisms expressed by almost all of the teachers concerned the content of the films. The concensus appeared to be that single, unrelated noun vocabulary films were not as appropriate or beneficial as unit or category oriented films or descriptive stories would be.

With regard to the preposition films, several of the participants



contended that use of "unrealistic" situations, e.g. "The tree is in the bathtub" was confusing and possibly detrimental.

Variation in the level of work being done by deaf students of similar ages in different programs was reflected in the fact that some teachers felt that the films were too elementary and others that they were too advanced. For example, one teacher of five and six year olds commented that the films were too difficult and that her pupils were unable to read and write the cursive writing which accompanied the pictures. Another teacher of pupils of approximately the same age felt that the films would be most appropriate for three to five year old children.

A wide variation was also seen in the relative sophistication of the participating teachers in the concepts and procedures of individual, child-controlled learning and programmed instruction. The criticisms expressed by some of the teachers left the impression that they were not accustomed to having their pupils work independently and that they had difficulty organizing opportunities for this. These teachers appeared to want movies which could be shown to the entire class rather than auto-instructional films which could function either as a part of the language curriculum or independent of it.



#### DISCUSSION AND CONCLUSIONS

The results of this study are somewhat unclear because of the divergence in teacher application of the experimental films. While flexibility of procedure was an intentional part of the research design, it has made it impossible to state conclusively the degree and source of benefit obtained by the students. Analysis of scores on the Illinois Communication Scale does suggest, however, that the speech reading ability of those students (Group III) who had two years exposure to the films and equipment was significantly improved. In addition, teacher evaluation revealed general agreement that autoinstructional films designed to facilitate language and speech reading development have considerable potential for profitable use with young deaf children.

As all possibly relevant variables in the research could not be controlled, it is difficult to explain why Group I, which did not have benefit of the experimental films, appeared to achieve at a higher level on the ICS than Group II. Differing composition of the two groups in terms of intelligence, previous education, and quality of present educational program is an obvious possibility. Age of the children is a second consideration; Group I was, on the average, one year older than Group II. Perhaps the most logical explanation, however, is that the samples of the original language films which were provided to the teachers of Group I children did not differ as greatly from the experimental films as had been thought. Thus, if this were



true, Group I was not, in fact, a control group, but rather, a group which was using instructional media that was quite similar to that used by the supposedly experimental group. Because of the relatively moderate increment in speech reading ability displayed by either Group I or Group II, the finding that the entering ability, or pretest scores on the ICS, of the children in both of these groups was considerably higher than the score of the ICS standardization population, becomes fairly interesting. While admittedly conjectural, it may well be that the children chosen by the participating programs were already more proficient in language and speech reading than the "typical" deaf child of comparable age. Thus, the films may have been elementary for these particular children, which could account, in part, at least, for the mederate, rather than marked, improvement in language skills.

Both the ICS results and teacher comments suggest that the films, as presently constituted, may be most effective with young, beginning level deaf children. Whether the most appropriate age level is 3 through 5 or 6 years, however, depends on the provision of a response from the child which does not require a skill, e.g. cursive writing, which he does not currently have.

The performance of Group III, i.e., an improvement in measured speech reading ability of 50 per cent from first pre-test to last posttest, provides another clue as to a possible reason for the more limited progress of Groups I and II. It would appear that one academic year is too brief a period for use of experimental films to be reflected in



student performance. Group III, unlike Groups I and II, had two years' utilization of the equipment and films, which may, in view of the results, be the minimal time required for teacher and pupil to obtain optimal benefit. A provocative finding, which would have to be replicated in order to be viewed as significant, is that Group III's average raw score on the ICS did not decrease between the administration of the first post-test and the second pre-test, although a three month's summer vacation had intervened. In fact, a slight increase was noted (26.30 vs. 25.86), suggesting satisfactory retention of the skills which had been learned.

Che of the intangible but substantive findings of the study was that the cooperating teachers varied greatly in their understanding and application of individualized instruction, purposes of media and objectives of the present research. Unfortunately, all of the teachers had not attended the orientation workshop but even some of those who had did not seem to realize that the films which they had been provided were not "finished products" but experimental efforts intended for evaluation. Because of this misunderstanding, a few of the teachers seemed to feel that if the films did not meet their expectations or were not, to them, appropriate, they were entitled to discontinue using them with the children, or to reduce the amount of time spent on their usage. Other teachers, while equally critical of the film content, continued to employ the films, with extremely ingenious adaptations when necessary.



While the point was well taken that unrelated noun vocabulary was not the most advantageous content of language films, many of the teachers who expressed this criticism stated that they had not attempted to teach the vocabulary prior to the children's use of the films or to integrate the film content into their on-going curriculum. The impression received was that all but a few of the teachers were unable to see the value of material that was unrelated to their presentations, or to promote integration. Those teachers who, in the investigators' subjective opinion appeared to make most effective use of the films, were those who prior to the introduction of "teaching machines" had minimized "group" instruction of their children and had placed stress on the child's being able to work independently. It would appear that unless a teacher is committed to the philosophy that learning can and must, take place without teacher control, benefit derived from any instructional materials will be extremely minimal.

These comments reflect the need for more intensive instruction of teachers prior to the utilization of auto-instructional materials, and the provision of on-going consultation. One of the limitations of the study was that in an effort to allow freedom of application and creativity, sufficiently specific guidelines and directions were not given. A major recommendation emerging from the study would be that a comprehensive orientation to the concepts of programming, apart from hardware considerations, be presented to all teachers before distribution of materials.



#### **SUMMARY**

Three hundred and six 8mm cartridge-type, continuous loop films were produced to provide deaf children instruction in and practice with noun vocabulary, question forms, prepositions and speech reading. The films were designed to be used in easily operated projectors with self-contained TV-type screens.

For evaluation purposes, the films and projectors were placed in twelve classes for the hearing impaired, taught by teachers who had been given the opportunity to attend a three-day orientation workshop on the objectives and uses of the materials. The amount of time spent on the films by individual children and the method of presentation was to be determined by the teachers.

Thirty-eight children (Group I), with a median age of 8-6, worked with the projectors and a selected sample of language films, which were similar to but not a part of the experimental films, for one school year. Forty-three children (Group II), ages 4 to 14, median age 7-6, used the experimental films for one year, and twenty-nine children (Group III), median age 6-6, were involved in the project for two years, using both the selected sample of language films and the ones designed specifically for this study.

To obtain an indication of progress in speech reading ability, the Illinois Communication Scale, Form B, a 50 item filmed test of speech reading of single words, sentences and descriptive stories was administered to each participating class prior to each of the two



academic years and at the end of each of these years. Detailed evaluations by teachers were also obtained to assess the over-all effectiveness of the materials, and to identify needed modifications or improvement. Because of the limited experimental controls employed in the research design, the findings on both the Illinois Communication Scale and the teacher evaluations are suggestive rather than conclusive.

Increases in measured speech reading ability were noted in all three groups, with the most substantial gain (50% improvement over two years) being made by Group III which, although younger than Groups I or II, had had exposure to both series of films over a two year period of time. Increments of 21.74% and 12.00% were achieved by Groups I and II, respectively. Reasons suggested as possible explanations of Group I's superiority over Group II were 1) differing composition of the two groups in terms of intelligence and previous education, 2) age differences and 3) greater similarity between the non-experimental sample films and the experimental films than had been thought.

Teacher evaluations revealed general agreement as to the potential value of language and speech reading films, the interest appeal and technical adequacy of the equipment, enthusiasm of the participating students and a preference for sound rather than silent films. The major criticism related to film content. Almost all of the teachers objected to films containing unrelated noun vocabulary, contending that subject unit or category oriented presentations would be more appropriate and beneficial. While no concensus was revealed with



regard to the age group for which the films appeared most appropriate, there was some indication that although the approach could be profitably applied with any age, the present films were most suitable for the age range three to about six years.

The influence of teacher understanding of and commitment to the principles of child directed, independent learning, and programmed instruction on effective application of auto-instructional filmed materials was discussed. It was pointed out that one of the limitations of the study was inadequate orientation and lack of continuous consultation and guidance. The recommendation was made that, in addition to incorporating some of the excellent teacher comments on the composition of the films, it is essential to provide a comprehensive orientation on the concepts of programming and permitting students to work independently, prior to further distribution of films.



#### REFERENCES

- Furth, H., A psychologist's view on the slow-learning deaf child. Proceedings of the 40th Meeting of the Convention of American Instructors of the Deaf, Washington, Government Printing Office, 1962, p. 188.
- Lowell, E., A point of view regarding the multiple handicapped deaf. Proceedings of the 40th Meeting of the Convention of American Instructors of the Deaf, Washington, Government Printing Office, 1962, p. 64.
- Quigley, S. P., and Frisina, D. R., <u>Institutionalization and Psychoeducational Development of Deaf Children</u>, CEC Research Monograph, Series A, No. 3, 1961.
- Withrow, F. B., The development of a receptive communication scale for deaf children. Final Report Grant No. 32-23-000-1027.

  J. S. Dept. of Health, Education, and Welfare. Office of Education, Bureau of Research, 1966.



# ILLINOIS COMMUNICATION SCALE

Greater than 12db Flat Rising Curve U-shaped Curve N.B. 500 CPS  SCORE  FORM PART I PART II PART III PART IV PART V TOTAL "A" "B" "C" "O"	KAKE:							_SCHO	OL_								
AVERAGE ACHIEVENEMT SCORE:  PREVIOUS YEARS IN ATTENDANCE: 1, 2 3 4 5 6 7 8 9 10 11 12 13  DEAFNESS OF RELATIVES: M	BIRTHDATE	:			DATE: 1.Q.:												
### PART 1   PART 11   PART 11   PART 1V   PART V   TOTAL      FORM   PART 1   PART 11   PART 11   PART 1V   PART V   TOTAL     "A"   "B"   "C"   "D"   "D"   "C"   "D"   "D"																	
## EAR (Average for 500, 1000, 80 - 90 2000 CPS. ISO 1964): 70 - 80 60 - 70 80 70 - 80 50 60 70 - 80 50 - 80 70 - 80 50 - 80 70 - 80 50 - 80 7	PREVIOUS	YEARS IN AT	TENDA	NCE:	1,	2	3	4	5	6	7	8	9	10	11	12	13
Flat Rising Curve U-shaped Curve N.B. 500 CPS  SCORE  FORM PART I PART II PART III PART IV PART V TOTAL "A" "B" "C" "D"	DEAFNESS	OF RELATIVE		F S M and				HEAR EAR 2000	ING (Aug CPS	LEVE rage . 1.	LS SO	IN BET % 500; 1964}:	TER 10	00,	80 70 60 50	- 9 - 8 - 7 - 6	0 0
Flat Rising Curve U-shaped Curve N.B. 500 CPS  SCORE  FORM PART I PART II PART IV PART V TOTAL "A" "B" "C" "D"	SHAPE OF	AUDIOGRAM:	Less	than	12db			USED	HEA	RING	AT:	D DURI	ING	TEST	:		
SCORE     SCORE			Flat Risi U-sh	ng Cu aped	uve Curve	<b>æ</b>				yes			]	NO			
FORM PART I PART III PART IV PART V TOTAL  "A"  "B"  "C"  "D"		·															
FORM PART I PART III PART IV PART V TOTAL  "A"  "B"  "C"  "D"	*****	**********			*****	****	***	9000		****	***	20000			****		20
FORM PART I PART II PART IU PART U TOTAL  "A"  "B"  "C"  "O"																	
FORM PART I PART II PART IU PART U TOTAL  "A"  "B"  "C"  "O"																	
"A" "B" "C" "O"						<u>sc</u>	ORE										
"A" "B" "C" "O"																	
"8"	FORM	PART		PA	RT 11_		PAR	T 111	Γ	PART	10	PAF	et v		TOTA	\L_	
"B" "C" "D"	"A"																
"""	"8"							•									
<del></del>	"C"							•									
ng:	"0"	,,					_		Τ					$\neg$			
	"E"												·				
	remarks:_																
REMARKS:											_						
REMARKS:							_									_	
REMARKS:															_		
REMARKS:																	

Test administered

by:



Name Age	361001
	6 The state of the
	7
3 DON	S S P
4	
MAKA SOOBS SOOBS	10 D

Part I Form B

Name Age	School
AND AND	7 All Print
可是	9 Final State of the state of t
	10 Cilian State

Part II

Form B

## FORM "B", PART III.

1.		There were six hats in the bag.	6.		She chewed it.
		Three hats.			The little girl blew up the balloon.
		Two hats were in the bag.			Put it in her shoe.
		No hats were in the bag.			There were no balloons.
	-	•			
2.		Under the chair.	7.		The hat was blue.
		The brown paper bag was on the table.			It was orange
		There was no paper bag.			She did not have a hat.
		The bag was in the wastebasket.			Red and yellow.
		<u></u> .			
3.		It flew into the air.	8.		I don't know who had a party.
		It fell over and things spilled out			Mother and father had a party.
		of it. Water came out of the wastebasket.			The little girl.
		Nothing happened to the wastebasket.			The children.
					·
4.		The balloons were in the little girl'	s 9.		The blue balloon did pop.
		purse. In the glass.			No it did not pop.
		All of the balloons were in the bag.			Yes it did.
		The little girl did not have any ball	oons.		It flew away.
		•			
				_	·
5.		The dog found it.	10 .		A large brown paper bag was in the wastebasket.
		The little girl found the paper bag.			A toy airplane was in the wastebasket.
		Mother found the paper bag.			Some trash was in the basket.
		There was no paper bag.			A book was in the basket.



# PORM "B", PART IV.

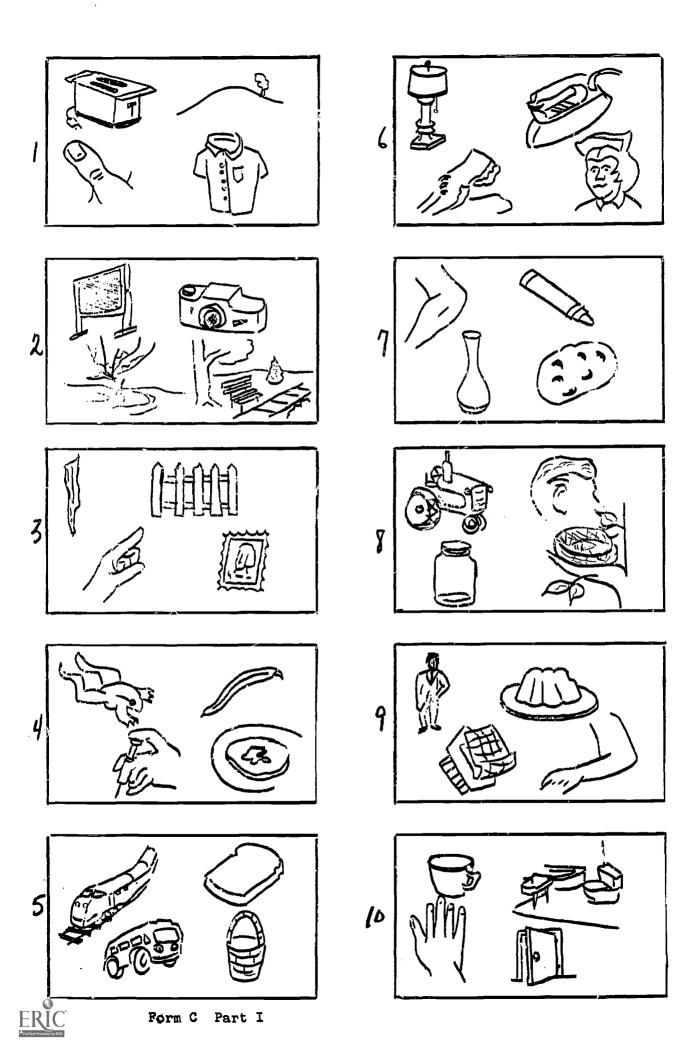
1.		I don't know.	6.		The man at the store.
		Melvin climbed up into the tree.			Their neighbor.
		No, he did not.			Uncle Jim.
		Yes, he did.			Mother gave them rags for the tails of
					their kites.
		·			·
2.		When it was snowing.	7.		There were three boys flying kites.
		At night.			Seven
		One windy day.		$\Box$	One boy.
		After school.		$\overline{\Box}$	Four boys were flying kites.
				<u></u>	
3.	П	The color of the kite was brown.	8.	$\overline{\Box}$	It was raining outside.
	$\overline{\Box}$	Red.		$\overline{\Box}$	It was a windy day.
	$\Box$	The kite was yellow.		$\overline{\Box}$	It was snowing.
		Black.			It was broken.
	L.I	-		لـا	
		0.11	_		•
4.	L	Sally.	9.		Into the water.
	L	The girl's name was Barbara.			The kite fell into the bost.
		Her name was Pam.			It fell in a tree.
		Jane.			The blue kite fell in the street.
					Market and the same and the sam
		·			
5.		Grandmother had a red kite.	10.		From the baker.
		Peom.			They got them from their teacher.
		There was no red kite.			At the police station.
		Father.			The children got their kites at the
					store
					_
				-	



#### PORM "B", PART V.

1.	Hi there!	6.	Close the door.
	Hello.		Put on your pajamas.
	Come on.		Go to bed.
	Good-bye.		Go home.
	 <del>.</del>		 ·
2.	Has the mailman come?	7.	It snowed very hard lest night.
	Do you have enough money?		I can't find a place to park the car.
	Why are you so late?		I bought a new car last week.
	Can't you see I'm busy?		It was good to see so many old friends
	<u> </u>		·
3.	Did you mail the letter?	8.	What time is it?
	How many girls went to the park?		What are you doing?
	Can I see you this afternoon?		What happened over there?
	Do you want some ice cream?		What's the matter with him?
	 		 <u>.</u> •
4.	I smell popcorn.	9.	January was very cold this year.
	Open the window.		He brings his lunch in a brown bag.
	Use the dictionary.		He is a long way from home.
	Put some wood on the fire.		January is a long month.
			 <u> </u>
5.	I can't read without my glasses.	10.	He cooked the fish.
	I hit my thumb with a hammer.		Let's go for a walk.
	They had a good time at the party	·•	Let's get in out of the rain.
	They were very late getting to wo		He can't hear a thing.
	today.	1	
	 <del></del>		•





	Name	Age	School
•			
2	はいい。		7 2 3 3 3 3
3		A STANCT	
4	FINANCE /		9 % 部
5			10

#### FORM "C", PART III.

1.	Grandfather ate a cookie.	6.	Threw it out of the window.
	The little girl.		Gave it to the dog.
	There were no cookies.		The little girl ate the cookie.
	John ate a cookie.		The little girl put the cookie in the
		_	cookie jar.
		<u>.</u>	 
2.	Mother	7.	It was green.
	The little dog.		The cookie jar was blue.
	The horse made the cookies.		The color of the cookie jar was white.
	No one wads the cookies.		There was no cookie jar.
		-	
		:	 
3.	On the floor.	8.	In the wastebasket.
	Thore was no cookie jar.		The cookies were in a box.
	The cookie jar was on the shelf.		Inside the cookie jar.
	It was under the chair.		The cookies were on the table.
4.	The cookie jar did not break.	9.	Cookies were in the jar.
	Yes, it did.		There was ice cream in the jar.
	It fell off of the shelf.		In the jar the little girl found some
	It fell on to the floor and broke.		The cookie jar was empty.
			· · · · · · · · · · · · · · · · · · ·
	 <u> </u>		 <u>.</u>
5.	There were none.	10.	She fell off the stool.
	Five of them.		The shelf broke.
	There were six cookie jars.		The little girl did not reach for the
	One cookie jar was on the shelf.		cookie jar. The cookie jar fell off the shelf.
		ı	



## PORM "C", PART IV.

1.		In the wastebasket.	6.	The wind.
		Mother put the balloons in her		The boys did.
		pocket. She put them on the table.		Pepper's claw burst the balloon.
		In the box.		The balloon did not break.
•		<u>.</u>		
		<u></u>		 · · · · · · · · · · · · · · · · · · ·
2.		The balloons became larger.	7.	The balloon was green.
		Pepper ran away.		It was red.
		The balloon broke when Pepper hit it.		The balloon was blue.
		Nothing happened.		It was yellow
		<u> </u>		 <u> </u>
3.		There were five boys.	8.	Mother did.
	$\Box$	There were two boys.		The mailman
		Seven boys.		Pat blew up the balloon.
		Two.		Uncle Joe blew it up.
٠			9.	
•		<u> </u>		•
4.		Mother went to the store.	s.	The boys spanked the baby.
		To the baseball game.		Yes, they did.
		She went outside.		They spanked Pepper.
		She went to the kitchen.		No, the boys did not spank Pepper.
5.		The man at the store.	10.	A hot windy day.
		Mother gave them the balloons.		After school.
		A dog gave them the balloons.		They got the balloons one cold, rainy day
		No one gave them the balloors.		There were no balloons.



#### POSM "C", PART V.

1.	I don't see it!	6.		Open the window.
	Shine your shoes.			Come on in.
	I don's know.			Turn off the lights.
	This is Ruth's brother.			The door is open.
				·
2.	Have you been here before?	7.		Your shirt is torn.
	☐ Have you found your keys?			Your room is messy.
	How many fish did you catch?			Your hair needs con lng.
	☐ How did you get here?			Your shoes need shining.
				<u>.</u>
3.	Hay I see that?	8.		I'm tired.
	Tom found a purse.			She's sick.
	The pursa is black.			He needs help.
	Nay I help you?			Come on.
	<b></b>			
4.	Do you want the door open?	9.		Show me your sore tooth.
	Can I have five dollars?			Tomorrow will be Monday.
	Do you have a watch?			Show me where it hurts.
	Can I go to a movie?			Tomorrow it may snow.
		1		•
5.	The letter is on the table in the	hall. 10.	$\Box$	That sweater is dirty.
	Put the purse on the table in the bedroos			She came to school early.
	She went to church with her mother		7	•
	The church was very old and beauti	ful.		We picked up her handkerchief.
	<b>-</b>			She made an apron.
		•	لسا	



	Name	Age	School
1			
2			7
3			8
4			9 60
5			10

Name Age	School
和一种	7 All Section of the
3	A SECOND
4 PARTIES DA	9 Frank Maria
5	10



Form D Part II

#### PORM "D", PART III

1.	The hat was blue.	6.	Threw them away.
	The hat was red.		Put them in the wastebasket.
	It was green.		The little girl ate them.
	The hat was brown.		She put them around her neck.
2.	Three shoes were in it.	7.	The dress was black.
	In the suitcase there was one pair of shoes.		Green and white.
	There were three pairs of shoes in the suitcase.		Blue and orange.
	Six pairs of shoes.		The color of the dress was pink.
	 <u>.</u>		 
3.	Mother put the dress in the suitcase.	8.	The little girl.
	I don't know who put it in the suitcase	•	Mother put on the dress.
	There was no dress in the suitcase.		The monkey put on the dress.
	Mrs. Smith put the dress in the suitcase	е.	There was no dress.
	 ·		 •
4.	Play clothes were in the suitcase.	9.	The girl fell down.
	A cat was in the suitcase.		No, she didn't.
	A red hat was in the suitcase.		Yes, she tripped and fell down.
	Nothing was in the suitcase.		She did not fall.
5.	Under the sink.	10.	She dropped her purse.
	The shoes were in the purse.		It began to rain.
	In the suitcase.		Her hat fell off.
	There were no shoes.		The little girl fell when she began to
			welk
			 <u> </u>



#### FORM "D", PART IV.

John and Billy cleaned their side walk after school. One cold, winter day.  She fell down in the snow. No, she did not fall. Betty did not fall into the snow. Yes, she fell into the snow.  The boys had an idea. Mother had an idea. John did.  The baker did. No, he didn't think they were smart. A cat thought they were smart.  The dog had on a yellow hat. It was on the snowman. The yellow hat was on the tree. There was no yellow hat.	<b>in</b>	6.		The mother and father made it.
walk after school.  One cold, winter day.  She fell down in the snow.  No, she did not fall.  Betty did not fall into the snow.  Yes, she fell into the snow.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  Tho dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.			Ц	John and Betty did.
One cold, winter day.  She fell down in the snow.  No, she did not fall.  Betty did not fall into the snow.  Yes, she fell into the snow.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  Tho dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.	6 <b>-</b>			The snowman was made by the teachers.
2. She fell down in the snow.  No, she did not fall.  Betty did not fall into the snow.  Yes, she fell into the snow.  The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart!  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				Grandaother made a snowman.
2. She fell down in the snow.  No, she did not fall.  Betty did not fall into the snow.  Yes, she fell into the snow.  The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				
No, she did not fall.  Betty did not fall into the snow.  Yes, she fell into the snow.  The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart!  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.	·			<u> </u>
Betty did not fall into the snow.  Yes, she fell into the snow.  The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart!  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.		7.		In the car.
The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart!  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				The shovel was under the table.
3. The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  It was on the snowman.  The yellow hat was on the tree.	•			The children's shovel was broken.
5.  The dog did.  The boys had an idea.  Mother had an idea.  John did.  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  It was on the snowman.  The yellow hat was on the tree.				I did not see the shovel.
The boys had an idea.    Mother had an idea.   John did.   The baker had an idea.   The baker did.   No, he didn't think they were smart.   A cat thought they were smart.   The dog had on a yellow hat.   It was on the snowman.   The yellow hat was on the tree.				
The boys had an idea.    Mother had an idea.   John did.   The baker had an idea.   The baker did.   No, he didn't think they were smart.   A cat thought they were smart.   The dog had on a yellow hat.   It was on the snowman.   The yellow hat was on the tree.	<u> </u>			
Mother had an idea.  John did.  1. Yes, he thought they were smart!  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.		8.		The people.
John did.  4.				The children.
4 Yes, he thought they were smart!  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				The boys.
4 Yes, he thought they were smart!  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				The girls.
4 Yes, he thought they were smart!  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				
4 Yes, he thought they were smart!  The baker did.  No, he didn't think they were smart.  A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.			_	
No, he didn't think they were swart.  A cat thought they were swart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.	kids.	9.		There were two men.
A cat thought they were smart.  The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.				One man was shoveling snow.
5. The dog had on a yellow hat.  It was on the snowman.  The yellow hat was on the tree.	art.			No men shoveled snow.
☐ It was on the snowman.  ☐ The yellow hat was on the tree.				Five men.
☐ It was on the snowman.  ☐ The yellow hat was on the tree.				
☐ It was on the snowman.  ☐ The yellow hat was on the tree.				
The yellow hat was on the tree.	_	10.		It was brown.
				The snowman was red.
There was no yellow hat.				The color of the snowman was white.
<b>-</b>				It was black.
	مانند. د			
	<u> </u>			



#### FORM "D", PART V.

1.	Close the door.	6.	May I have some more meat?
	Open a window.		May I go with you?
	Pick up the pencil.		May I have some more beans?
	Sharpen your pencil.		May I see that please?
	O		
		•	
2.	Don't watch the clock.	7.	Make some more coffee.
	The dog ran away.		The coffee pot is empty.
	Don't come in here.		Do you want coffee or tea?
	How much is that clock?		Mny I have some sugar for my coffee?
	O	,	
		•	
3.	How much is it?	8.	Hit the ball.
	Where is it?		Step on it.
	Where are you going?		I'm thirsty.
	Have you any money?		I'm cold.
	<u> </u>	_	□
		<b>.•</b>	•
4.	Look at me, please.	9.	That car has a broken window.
	Look in the closet.		There is a good movie downtown.
	She found a doll.		Watch the cars when you cross the
	She's not here today.		He rode his horse down the main street.
		_	O
		<u>•</u>	
5.	Empty the wastebasket.	10.	I can't find my shoe.
	He bought a blue kite.		He ate six hotdogs.
	His new car is blue.		I lost my shoe.
1	The milk bottle is empty.		He climbed the tree.
			<b>-</b>
		_ <del>-</del> _•	



	Name	Age	_ School
	SHOE SHOE MOUTH SOLDY		
2		THAN ST.	7
3			
4			9
5			10 Part of the second s

Form E Part I

Name Age	School
1 Company	
2	7 Part RAPI
3	THE WAST
4	
5 III WATER	

Form E

Part II

#### PORM "E", PART III.

	Н	To a Lan	_	<b>_</b>	
1.		In a bag.	6.		The little girl cried.
		The hats were in a suitcase.		u	Dropped her comb.
	Ш	The hats were under a tree.			She ran home.
		In a box.			When the little girl saw the presents she laughed.
		·•			
2.		A box of candy.	7.		The doll was in the box
		There was a puppy in the blue			Under the lamp.
		A doll.			The doll was in the purse.
		In the blue present there was a cake.			In the snow.
3,		Black.	8.		The little girl ate the doll.
		The color of the doll's hair was green	n.		She put the doll in her pocket.
	$\Box$	Brown.			Put a hat on the doll.
		The doll's hair was yellow.			She did not have a doll.
		·			
	l			لسبيا	
4.	$\overline{\Box}$	Seven.	9.	$\overline{\Box}$	She put on the policeman's hat.
	$\overline{\Box}$	There were two hats in the box.		$\Box$	Yes. She did put it on.
	$\Box$	Four hats were in the box.			The little girl did not put on a straw
		In the box there were nine hats.			hat. I don't know.
				$\Gamma$	
	-				
5.	$\overline{\Box}$	A horse.	10.		Grandmother.
		Her mother gave her a doll.			The dog opened the presents.
		She found the doll.			The little girl.
		There was no doll.			Mother opened the presents.
		MOYO MED UM COTT.			mouner opened the presents.
	Ц			יי	
		<u> </u>			

1.



#### PORM "E", PART IV.

1.	At school.	6.	The bag was orange.
	Frank bought the cookies at church.		It was brown.
	He bought cookies at the bakery.		The paper bag was black.
	Frank bought them.		There was no paper bag.
	 <u>.</u>		 
2.	He ate six cookies.	7.	The boys did.
	Frank ate nine cookies.		Grandmother baked them.
	One cookie.		No one bought them.
	He didn't eat any cookies.		Frank bought the cookies.
	 		 <u>.</u>
3.	One cold day.	8.	Seven children.
	His mother did not give him a cookie.		No one ate cookies.
	Frank's mother gave him a cookie at		Three of them ate cookies.
	breakfast. One summer day his mother gave him 2	5¢.	Five children ate cookiss.
	 <u>.</u>		 <u> </u>
4.	He threw away the paper bag.	9.	The children played tag.
	I don't know.		They just sat down.
	No, he did not.		They played baseball.
	Frank threw away the paper bag.		The children played with doils.
	 	,	 ·
5.	The lady in the bakery.	10.	He was going to church.
	A baseball pisyer put the cookie in		Frank was walking to grandmother's
	the bag. No one put the cookies in it.		Frank was going home.
	Frank's teacher did.		He was going to school.
		•	



## PORM "E", PART V.

1.	Don't stop.	6.	Good Evening.
	Stop shoving.		Good-bye.
	Stop that!		Good Morning.
	Don't shove.		So Long.
2.	It's almost time to start.	7.	I like to exercise in the gym.
	The meeting will start soon.		Bowling is a good exercise.
	Can you come to the meeting?		Do you like to bow1?
	The meeting was last night.		The sum was bright.
	 	•	 ·
3.	The boys are playing baseball.	8.	Give me a yellow pencil.
	Try very hard to hit the baseball.		She hurt her arm.
	The boys are playing football.		I want a pencil.
	The boys played a good game today.		She broke her leg.
		•	 
4.	The water is too cold.	9.	lisw far did you go?
	It's cold outside.		What's her name?
	This is the hottest day this summer.		How did you break it?
	The water is too hot.		What kind of man is he?
		•	 
5.	I read about that in a book.	10.	Don't you think it's cold in here?
	The dog bit the man.		Can't you come over tonight?
	I read it in yesterday's paper.		Can I have one of those apples?
	The man hit the dog.		Do you think it will rain?
		Ī	
		•	 <u></u>



# Appendix C

# ILLINOIS SCHOOL FOR THE DEAF Jacksonville, Illinois (Captioned Films for the Deaf - Project #OE6-19-074)

Did you obtain any new ideas in the short 1966 Summer Workshop that you were able to put into use in the classroom? If so, please elaborate.
Did you find it possible to use the projectors without a teacher?
Were you able to use the projectors by having one pupil monitor another pupil at the machine?
Was maintenance of the equipment satisfactory? If not, please elaborate.
In your estimation, how many projection lamps were used weekly? Monthly?
Do you feel that the "Paired Associate Learning-Task", within the media, transferred to spontaneous usage by the pupil?
Were the vocabulary and language principles taught before showing the film?
Were other "loop films" available for use, or used?
Were teaching booths provided for the pupils while they were using the machines?
Were the illustrations clear?
In your opinion, do you find these materials and machines worthwhile in your classroousage?
Please elaborate on your use of the machines, and describe how you worked them into y program. Also, please list the problems you encountered, as well as criticisms of the machines, materials, illustrations, etc. (Use back of questionnaire, if necessary.)
SCHOOL:
TEACHER:
DATE: